



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,456	05/27/2005	Nicolas Sarrut	123883	3380
25944 7590 05/14/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
NOGUEROLA, ALEXANDER STEPHAN				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
05/14/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/534,456

**Applicant(s)**

SARRUT, NICOLAS

**Examiner**

ALEX NOGUEROLA

**Art Unit**

1795

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 10, 11 and 13 is/are rejected.
- 7) ☒ Claim(s) 9, 12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed February 24, 2009 ("Arguments") have been fully considered but they are not persuasive. Applicant asserts, "... the electrodes in Le Pesant are not arranged over the entire length of the microchannel as called for in claim 8 ... Regarding the Examiner's first assertion, nothing in Le Pesant, nor the Office Action's rejection of the claims, suggests that one of ordinary skill in the art would interpret anything less than the entire space between plates 1 and 2 as a microchannel." See bottom of page 5 of Arguments, bridging to page 6. Applicant's representative has misunderstood the Examiner. The Examiner does not assert that anything less than the entire space between plates 1 and 2 can be construed as a microchannel. Claim 8 recites "... wherein the means for stabilizing comprises at least one electrode arranged on only one part of a first wall, over the entire length thereof ... [emphasis added]" That is, claim 8 does not require this at least one electrode to be arranged over the entire length of a first wall, but only over *a part* of the first wall. Electrodes 5 and 11 in Figure 3 of Le Pesant are each clearly arranged over the entire length of only one part of the first wall. The only one part of the fist wall is coextensive with the at least one electrode. Similarly, claim 8 also requires "... at least one counter-electrode arranged over the entire length of the microchannel, on at least one part of a

second wall arranged facing the electrode, ..." Electrodes 6 and 10 in Figure 3 of Le Pesant are arranged over the entire length of *at least one part* of a second microchannel wall arranged facing the electrode. Indeed, Applicant's Figure 11, which presumably is an embodiment of at least claim 8, shows opposing electrodes (10 and 9) not completely covering respective microchannel walls as Applicant believes the claim requires. Regarding the Examiner's second assertion, the point here is that even if Applicant amended the claim to have the electrodes span a length from one edge of the device to an opposing edge, this would be obvious over Le Pesant. Turning to Figure 3 in Le Pesant, to merely extend the width of electrodes 5 or 11, and 6 or 10, so that they reach the lateral edges of the device and to further extend the distance between the lateral edges of the device so that it is the "length" (as supposed to width) is just a change in size and shape.

Applicant also asserts, "Contrary to the Office Action's analysis, electrodes 5, 6, 10, and 121 could not be assimilated as a means for stabilizing the interface." See page 5 of the Arguments. Claim 8 states, "... the means for stabilizing comprises at least one electrode arranged on only one part of a first wall of the microchannel, over the entire length thereof, and at least one counter-electrode arranged over the entire length of the microchannel, on at least one part of a second wall arranged facing the electrode, .. ." Since Le Pesant discloses the claimed arrangement of electrodes Le Pesant also discloses means for stabilizing the interface between the liquid and the fluid, unless there is additional essential structure that has not been included in the claim.

***Status of the Objection and Rejections pending since the Office action of  
November 28, 2008***

2. The rejections of claims 8, 10, and 13 under 35 U.S.C. 102(b) as being anticipated by Le Pesant are maintained.
3. The rejection of claim 11 under 35 U.S.C. 103(a) as being obvious over Le Pesant is maintained.
4. The rejections of claims 8-14 under 35 U.S.C. 112, second paragraph, are withdrawn.
5. The objection to claim 8 is withdrawn.

***Allowable Subject Matter***

6. Claims 9, 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: See page 6 of the Office action of November 28, 2008.

***Final Rejection***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alex Noguerola/  
Primary Examiner, Art Unit 1795  
May 12, 2009